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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/758,321	01/12/2001	Norimasa Niiya	04329.2495	9116

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EXAMINER	
TAYLOR, BARRY W	

ART UNIT	PAPER NUMBER
2643	

DATE MAILED: 04/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/758,321	NIIYA, NORIMASA	
	Examiner	Art Unit	
	Barry W Taylor	2643	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 September 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,5 and 9-14* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *1,5 and 9-11* is/are allowed.

6)☒ Claim(s) *12-14* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1. Claims 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mano et al (5,319,700 hereinafter Mano) in view of Seazholtz et al (6,424,636 hereinafter Seazholtz).

Regarding claims 12 and 14. Mano teaches a an interface unit (9,11, 13, 15, 17 and 19 figure 1, col. 3 lines 1-25) capable of being connected to a main unit of a key telephone system (1 figure 1), the main unit connecting a telephone terminal (27 figure 1) to a telephone network (25 figure 1), the interface unit being adapted to be communicated with the telephone terminal at one of plural transmission speeds (col. 1 lines 13-65, see figure 4 wherein "PING-PONG" communications is employed by using the D-Channel to select "low level" or "high level"--column 6 line 66+), the interface unit comprising:

Mano does not explicitly show using a first transmitter and a second transmitter (see paper number 7, Amendment "A", dated 12/2/02 first full paragraph on page 5 of Applicant's remarks). In other words, Mano figure 2 shows old type key telephony but

lacks expansion capability. The only limitation missing is that Mano does not explicitly show using a first transmitter and a second transmitter (see paper number 7, Amendment "A", dated 12/2/02 first full paragraph on page 5 of Applicant's remarks).

Seazholtz teaches first and second transceivers used to change speed (see ADSL/AVRs in abstract and figures 1-2, 7, 9). In other words, Seazholtz discloses programmable transceivers wherein each transceiver can be selectively configured to allow for future upgrades by using same hardware (col. 7 lines 12-24, col. 11 line 30 – col. 12 line 44, col. 13 lines 44-56, col. 17 line 8 – col. 28 line 30).

It would have been obvious for any one of ordinary skill in the art at the time of invention to modify the terminal adapter as taught by Mano to use programmable transceivers as taught by Seazholtz so that transceiver rates may be changed by using 2B1Q line encoding as taught by Seazholtz (col. 20 lines 20-22).

Regarding claim 13. Mano does not disclose causing the telephone terminal set an operation speed to the optimum speed based on the detected result of the detector.

Seazholtz teaches first and second transceivers used to change speed (see ADSL/AVRs in abstract and figures 1-2, 7, 9). In other words, Seazholtz discloses programmable transceivers wherein each transceiver can be selectively configured to allow for future upgrades by using same hardware (col. 7 lines 12-24, col. 11 line 30 – col. 12 line 44, col. 13 lines 44-56, col. 17 line 8 – col. 28 line 30).

It would have been obvious for any one of ordinary skill in the art at the time of invention to modify the terminal adapter as taught by Mano to use programmable

transceivers as taught by Seazholtz so that transceiver rates may be changed by using 2B1Q line encoding as taught by Seazholtz (col. 20 lines 20-22).

2. Claims 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mano et al (5,319,700 hereinafter Mano) in view of Yoshida (5,943,364).

Regarding claims 12 and 14. Mano teaches a an interface unit (9,11, 13, 15, 17 and 19 figure 1, col. 3 lines 1-25) capable of being connected to a main unit of a key telephone system (1 figure 1), the main unit connecting a telephone terminal (27 figure 1) to a telephone network (25 figure 1), the interface unit being adapted to be communicated with the telephone terminal at one of plural transmission speeds (col. 1 lines 13-65, see figure 4 wherein "PING-PONG" communications is employed by using the D-Channel to select "low level" or "high level"--column 6 line 66+), the interface unit comprising:

Mano does not explicitly show using a first transmitter and a second transmitter (see paper number 7, Amendment "A", dated 12/2/02 first full paragraph on page 5 of Applicant's remarks). In other words, Mano figure 2 shows old type key telephony but lacks expansion capability. The only limitation missing is that Mano does not explicitly show using a first transmitter and a second transmitter (see paper number 7, Amendment "A", dated 12/2/02 first full paragraph on page 5 of Applicant's remarks).

Yoshida teaches using a control circuit for changing setting criteria of the baud rate and the bit rate of modem (abstract) wherein a control signal from control unit used (col. 3 line 25 – col. 4 line 15).

It would have been obvious for any one of ordinary skill in the art at the time of invention to modify the terminal adapter as taught by Mano to include control circuit as taught by Yoshida for the benefit of sending parameter signals to control transmission rates.

Regarding claim 13. Mano does not disclose causing the telephone terminal set an operation speed to the optimum speed based on the detected result of the detector.

Yoshida teaches using a control circuit for changing setting criteria of the baud rate and the bit rate of modem (abstract) wherein a control signal from control unit used (col. 3 line 25 – col. 4 line 15).

It would have been obvious for any one of ordinary skill in the art at the time of invention to modify the terminal adapter as taught by Mano to include control circuit as taught by Yoshida for the benefit of sending parameter signals to control transmission rates.

Allowable Subject Matter

3. Claims 1, 5 and 9-11 are allowed.

Response to Arguments

4. Applicant's arguments filed 9/9/04 have been fully considered but they are not persuasive.

a) Regarding Applicants remark regarding remaining dependent claims (i.e. claims 12 and 14) wherein Applicants contend that independent claims 12 and 14 include recitations similar to claim 1 (see last three lines on page 7, paper dated 9/9/04).

The Examiner respectfully disagrees. Independent claim 1 requires, inter alia, first transmitter configured to transmit a type query signal, a second transmitter configured to transmit a speed change request and change a transmission speed from low to high if received type signal indicates that the telephone terminal is capable of transmitting data at the high speed; a detector configured to determine whether data is transmitted from the telephone terminal at the high speed or the low speed; and a speed change unit configured to change a transmission speed from the high speed to the low speed when the detector determines that the data is transmitted form the telephone terminal at low speed. In other words, independent claims 12 and 14 fail to include the "similar" features of independent claim 1. Therefore, the Examiner previous rejection is maintained.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Davis et al (5,491,720 hereinafter Davis). Davis teaches method and apparatus for automatically determining data communication device type and corresponding transmission rate (Title, abstract). Davis teaches transmit and receive hardware are connected to the transmission line wherein a sequence of different signals in either a first communication protocol or a second protocol are transmitted from a first data

device and the transmission line is monitored for a response signal from a second device so that data communication device type and transmission speed can be determined enabling the first and second device to operate at an optimal transmission speed (abstract, columns 1-9 including independent claim 1). Davis also discloses that it is well known in the art to use separate transmit and receive hardware when negotiating data speed (column 1 line 33 – column 2 line 35). Davis does not limit his invention to using two separate transmitters but instead saves on hardware by using common transmit and receive hardware (column 1 line 65 – column 2 line 2).

Chen et al (5,448,560 hereinafter Chen). Chen teaches a system and method for changing transmission rates (abstract). Chen discloses that by using rate adapter (see RA3 figure 6) in conjunction with conventional adapters allows for ISDN services to be received (col. 10 lines 6-18).

Tanaka et al (6,496,576 hereinafter Tanaka). Tanaka already discloses using ping-pong transmitters at main unit (see fig. 5) and key telephony unit (see fig. 11) thereby providing for maximum transmission rate (col. 14 lines 28-57, col. 19 lines 14-35, col. 20 lines 17-47).

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Barry W. Taylor, telephone number (571) 272-7509, who is available Monday-Friday, 8am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis Kuntz, can be reached at (571) 272-7499. The facsimile phone number for this group is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group 2600 receptionist whose telephone number is (571) 272-2600, the 2600 Customer Service telephone number is (571) 272-2600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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